

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا
إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ
الْعَلِيمُ الْحَكِيمُ

صدق الله العظيم

سورة البقرة
الآية رقم (٣٢)

**A Study of Possible Means for Amelioration
of Endothelial Dysfunction in
High fat Diet-Fed Ovariectomized Rats**

*Thesis Submitted for partial fulfillment of the M.D. Degree in
Basic Medical Science (Physiology)*

BY

Manal Said Abd-El Hamid Ali

M.B., B.ch., M.Sc. physiology
Faculty of medicine – Ain Shams University

Supervisors

Prof. Dr. Fatma Ahmed Mohamed

Professor of physiology
Faculty of Medicine, Ain Shams University

Prof. Dr. Ebtessam Ahmed Abou Shady

Professor of physiology
Faculty of Medicine, Ain Shams University

Assist. Prof .Dr.Sahar Sobhy Thabet

Assistant professor
Faculty of Medicine, Ain Shams University

Dr. Abd-El Hamid Abo El-Magd Mohamed

Lecturer of physiology
Faculty of Medicine, Ain Shams University

*Physiology Department
Faculty of Medicine, Ain Shams University
(2013)*

دراسة عن الوسائل الممكنة لعلاج الخلل الوظيفي للخلايا
المبطنة لجدار الاوعية الدموية المصاحب لإستئصال المبيض
وتناول وجبات غنية بالدهون في الفئران

رسالة مقدمة من

الطبيبة/ منال سعيد عبد الحميد علي

المدرس المساعد بقسم الفسيولوجي

للحصول على درجة الدكتوراة في العلوم الطبية الاساسية

(الفسيولوجي)

تحت اشراف

الأستاذة الدكتورة / فاطمة أحمد محمد

الأستاذ بقسم الفسيولوجي

كلية الطب – جامعة عين شمس

الأستاذة الدكتورة / إبتسام أحمد أبو شادي

الأستاذ بقسم الفسيولوجي

كلية الطب – جامعة عين شمس

الدكتورة / سحر صبحي ثابت

الأستاذ المساعد بقسم الفسيولوجي

كلية الطب – جامعة عين شمس

الدكتور / عبد الحميد ابو المجد محمد

المدرس بقسم الفسيولوجي

كلية الطب – جامعة عين شمس

قسم الفسيولوجي كلية الطب – جامعة عين شمس

(٢٠١٣)

List of Abbreviations

α -LA	α -Lipoic acid
ACE	Angiotensin converting enzyme
Ach	Acetylcholine
ADMA	Asymmetric dimethylarginine
AGEs	Advanced glycation end products
AI	Atherogenic index
AMP	Adenosine mono phosphate
AMPK	AMP activated protein kinase
ANP	Atrial natriuretic peptide
ATII	Angiotensin II
apoA	Apolipoprotein A
AT1R	Angiotensin II receptor type 1
BH4	Tetrahydrobiopterin
BP	Blood pressure
BMI	Body mass index
BW	Body weight

Cal	Calories
CEC	circulating endothelial cells
CR	Caloric restriction
CRP	C- reactive protein
cGKI	cGMP-dependent protein kinase type I
cGMP	Guanylate cyclase
Df	Degree of freedom
DDAH	Dimethylarginine dimethylamino hydrolase
DHLA	dihydrolipoic acid
E ₂	17 β -estradiol
ED	Endothelial dysfunction
ER	Estrogen receptor
ET-1	Endothelin-1
ETA	Endothelin A
ETB	Endothelin B
e NOS (NOS-3)	Endothelial nitric oxide synthase
ECs	Endothelial cells
ecto-ADPase	Ecto- adenosine diphosphate

ecSOD	extracellular superoxide dismutase
EDCFs	Endothelium-derived contracting factors
EDHF	Endothelium-derived hyperpolarizing factor
EDRF	Endothelium-derived relaxing factor
EPC	endothelial progenitor cells
EPCR	Endothelial Protein C Receptor
FAD	Flavin adenine dinucleotide
FMD	flow-mediated dilatation
GLUT-1	Glucose transporter
GSH	Glutathione
HDL-C	High density lipoprotein
HR	Heart rate
HFD	High fat diet
ICAM-1	- Intercellular adhesion molecule-1
I-kB	Nuclear factor kappa-B inhibitor
IL	interleukin
iNOS (NOS-2)	Inducible NOS
IRSensor	Infra-red sensor

LDL-C	Low density lipoprotein
LP	lipoproteins
LOX-1	lectin-like ox-LDL receptor-1
LSD	least significant difference
M	Arithmetic mean
MCP-1	Monocyte chemotactic protein-1
NADPH	Nicotinamide adenine dinucleotide phosphate
NF- κ B	Nuclear factor kappa- B
NO	Nitric oxide
NOS	Nitric oxide synthase
nNOS (NOS-1)	Neuronal NOS
NOS III	Endothelial NOS
NOSII	Inducible NOS
ONOO ⁻	Peroxynitrite
Ob-Rb	leptin receptor gene
OVX	Ovariectomized
PAI-1	Plasminogen Activator Inhibitor-1
PAR	Thrombin receptor

PGI ₂	ProstaglandinI ₂
POF	premature ovarian failure
RAGE	Receptors for advanced glycation end products
ROS	Reactive oxygen species
SD	Standard deviation
SDF-1	Stroma-derived factor
SEM	Standard error of the mean
Sirt-1	sirtuin 1
SMC	Smooth muscle cells
SOD	Superoxide dismutase
SPSS	Statistical program for social science
TG	Triglycerides
TF	Tissue Factor
TFPI	Tissue Factor Pathway Inhibitor
TM	Thrombomodulin
TNF- α	Tumor necrosis factor- α
t-PA	tissue-Plasminogen Activator
VCAM-1	Vascular cell adhesion molecule 1

VEGF	Vascular endothelial growth factor
VLDL	Very low density lipoprotein
VP	Vasopressin receptor
VSM	Vascular smooth muscle
vWF	Von willebrand factor

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